

IN THE CLAIMS

Please amend claims 65 and 66 by rewriting the same to the following:

--65. (Thrice Amended) A method of recording data on an optical disk

having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said method comprising the steps of: providing user information for recording in a plurality of sectors in user tracks; providing table of contents (TOC) information for recording in a plurality of sectors in at least one TOC track, said TOC information including addresses of respective start sectors, each identifying a start sector of a respective user track; encoding both said user information and said TOC information in a long distance error correction code having at least eight parity symbols; modulating the encoded user and TOC information; recording the modulated, encoded TOC information in said at least one TOC track in said lead-in area; and recording the modulated, encoded user information in said user tracks in said program area with a track pitch in the range between 0.646  $\mu\text{m}$  and 1.05  $\mu\text{m}$ .--

--66. (Thrice Amended) Apparatus for recording data on an optical disk

having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said apparatus comprising: input means for providing user information for recording in a plurality of sectors in user tracks and table of contents (TOC) information for recording in a plurality of sectors in at least one TOC track, said TOC information including addresses of respective start sectors, each identifying a start sector of a respective user track; encoding means for encoding both said user information and said TOC information in a long distance error correction code having at least eight parity symbols; modulator means for modulating the encoded user and TOC information; and recording means for recording the modulated, encoded TOC information in said at least one TOC track in said lead-in area and for

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recording the modulated, encoded user information in said user tracks in said program area with a track pitch in the range between 0.646  $\mu\text{m}$  and 1.05  $\mu\text{m}$ .—

Please add the following new claims:

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--67. (New) A method of recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said method comprising the steps of: providing user information for recording in a plurality of sectors in user track regions; providing control information for recording in a plurality of sectors in at least one control information region; encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modulating the encoded user and control information; recording the modulated, encoded control information in said at least one control information region in either said lead-in area or said program area; and recording the modulated, encoded user information in said user track regions in said program area with a track pitch in the range between 0.646  $\mu\text{m}$  and 1.05  $\mu\text{m}$  and with a linear density in the range between 0.237  $\mu\text{m}$  per bit and 0.387  $\mu\text{m}$  per bit.--

--68. (New) Apparatus for recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said apparatus comprising: input means for providing user information for recording in a plurality of sectors in user track regions and control information for recording in a plurality of sectors in at least one control information region; encoding means for encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modular means for modulating the encoded user and control information; and recording means for recording the modulated, encoded control information in said at least

one control information region in either said lead-in area or said program area and the modulated, encoded user information in said user track regions in said program area with a track pitch in the range between 0.646  $\mu\text{m}$  and 1.05  $\mu\text{m}$  and with a linear density in the range between 0.237  $\mu\text{m}$  per bit and 0.387  $\mu\text{m}$  per bit.—

PD --69. (New) A method of recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said method comprising the steps of: providing user information for recording in a plurality of sectors in user track regions; providing control information for recording in a plurality of sectors in at least one control information region; encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modulating the encoded user and control information; recording the modulated, encoded control information in said at least one control information region in either said lead-in area or said program area; and recording the modulated, encoded user information in said user track regions in said program area with a track pitch in the range between 0.7  $\mu\text{m}$  and 0.9  $\mu\text{m}$ .--

--70. (New) Apparatus for recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said apparatus comprising: input means for providing user information for recording in a plurality of sectors in user track regions and control information for recording in a plurality of sectors in at least one control information region; encoding means for encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modular means for modulating the encoded user and control information; and recording means for recording the modulated, encoded control information in said at least one control information region in either said lead-in area or said program area and the

modulated, encoded user information in said user track regions in said program area with a track pitch in the range between 0.7  $\mu\text{m}$  and 0.9  $\mu\text{m}$ .—

P2 --71. (New) A method of recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said method comprising the steps of: providing user information for recording in a plurality of sectors in user track regions; providing control information for recording in a plurality of sectors in at least one control information region; encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modulating the encoded user and control information; recording the modulated, encoded control information in said at least one control information region in either said lead-in area or said program area; and recording the modulated, encoded user information in said user track regions in said program area with a track pitch in the range between 0.646  $\mu\text{m}$  and 1.05  $\mu\text{m}$ , wherein said optical disk has a linear velocity in the range of 3.3 m to 5.3 m per second during a playback operation.--

--72. (New) Apparatus for recording data on an optical disk having a diameter less than 140 mm and a recording area divided into a lead-in area, a program area and a lead-out area, said apparatus comprising: input means for providing user information for recording in a plurality of sectors in user track regions and control information for recording in a plurality of sectors in at least one control information region; encoding means for encoding both said user information and said control information in a long distance error correction code having at least eight parity symbols; modular means for modulating the encoded user and control information; and recording means for recording the modulated, encoded control information in said at least one control information region in either said lead-in area or said program area and the